

What is claimed is:

1. In a method of improving a transmission characteristic of an xDSL system that implements high-speed data communication over existing copper wires connecting an office and a subscriber, a testing system installed in an office pulls, before connection of a subscriber line to said xDSL system, said subscriber line at an outside line of an xDSL circuit, measures a cross-talk noise characteristic of said subscriber line, and prevents, if said cross-talk noise characteristic is of high level, said subscriber line from being connected to said xDSL circuit.

2. The method as claimed in claim 1, wherein said testing system transforms a level of cross-talk noise on the subscriber line to noise spectrum data by FFT (Fast Fourier Transform) and compares said noise spectrum data with a template for noise level decision, which is weighted at a subject frequency, to thereby determine whether or not said subscriber line is usable.

3. A system for measuring a transmission characteristic of an xDSL system that implements high-speed data communication over existing copper wires connecting an office and a subscriber, said system comprising:

pulling means included in an outside line of an xDSL circuit installed in an office for pulling a subscriber line;

noise level measuring means for measuring a level of cross-talk noise on the subscriber line; and

decision means for determining, based on the level of

cross-talk noise measured, whether or not the subscriber line is usable.

4. The system as claimed in claim 3, wherein said pulling means comprises:

an MDF U (Main Distribution Frame) connected to terminals T and R of the outside line at a subscriber side; and

relays connected to said MDF and connecting the terminals T and R to test terminals.

5. The system as claimed in claim 4, wherein said noise level measuring means comprises:

a voltage measuring circuit for measuring a cross-talk noise voltage input via said relays;

an ADC (Analog-to-Digital Converter) circuit for converting cross-talk noise voltage measured to a digital signal; and

an FFT (Fast Fourier Transform) circuit for transforming the digital signal to noise spectrum data.

6. The system as claimed in claim 5, wherein said decision means comprises means for comparing the noise spectrum data with a template for noise level decision to thereby determining whether or not the subscriber line is usable.

7. The system as claimed in claim 3, wherein said noise level measuring means comprises:

a voltage measuring circuit for measuring a cross-talk noise voltage input via said relays;

an ADC (Analog-to-Digital Converter) circuit for converting

cross-talk noise voltage measured to a digital signal; and

an FFT (Fast Fourier Transform) circuit for transforming the digital signal to noise spectrum data.

8. The system as claimed in claim 7, wherein said decision means comprises means for comparing the noise spectrum data with a template for noise level decision to thereby determining whether or not the subscriber line is usable.

2000-09-26/1559